

## NOTES ON *BRIARAXIS DEPRESSA* (COLEOPTERA: PSELAPHIDAE)<sup>1</sup>

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**ABSTRACT:** Discovery of the male of *Briaraxis depressa* prompted this redescription of the genus and species. It is known only from the Dry Tortugas, west of the Florida keys.

When returning from Cuba in 1894, H.F. Wickham was forced to spend a week at the yellow fever quarantine station on the Dry Tortugas, a group of small sandy islands 90 km west of Key West. He was able to go ashore for only a few hours a day to collect on Garden Key, which is almost entirely occupied by Fort Jefferson, and collected insects from the small marginal beaches, lamenting the depauperate fauna of the island (Wickham 1895). A pselaphid specimen collected during this enforced visit was sent by Wickham to his friend, Emil Brendel, for identification. Brendel (1894:158) compared this pselaphid to the European *Trichonyx* Chaudoir and the Australian *Briara* Reitter before describing it as a new genus and species, *Briaraxis depressa*. The holotype female of *depressa* has been the only representative of this species known to pselaphid workers for nearly 100 years.

While sorting the miscellaneous Pselaphidae at the National Museum of Natural History, Washington, I was quite surprised to discover a second specimen of this species (a male!) bearing the same label information as the holotype. Apparently Wickham had obtained two specimens, a male and female, and sent only the female to Brendel for his comments. The second specimen was later given to the National Museum as part of the Wickham collection. Discovery of the male has prompted me to redescribe the genus and species, since there have been some misinterpretations in discussion of the characters attributed to this taxon.

Brendel (1894) stated that the first visible abdominal tergite lacked basal longitudinal carinae, and that there were four vertexal foveae. This characterization has been used in subsequent treatments by Raffray (1908) and Bowman (1934), and in keys to Nearctic genera by Park (1953) and Chandler (1990). Foveae in Pselaphidae are the visible openings of internal cuticular projections, or may be applied to sharply defined cuticular pits. There is only one pair of foveae on the vertex indicating internal cuticular apodemes, and these are present in almost all Pselaphidae. There are also two small shallow impressions slightly postero-

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medial to the antennal bases (Fig. 1) that may indicate the insertions of the dorsal arms of the tentorium. However, they are not distinct enough to be regarded as foveae in the sense used by all pselaphid workers. Also, the basal longitudinal carinae of the first abdominal tergite are present, but are short and just barely visible extending from beneath the covering elytra.

### *Briaraxis* Brendel

*Briaraxis* Brendel 1894:158. Type species: *Briaraxis depressa* Brendel, by monotypy.

Bowman 1934:82, Park 1953:308 (key), Chandler 1990:1184 (key).

*Briaraxis* Raffray 1908:219, misspelling.

Head broad and flat, with nude vertexal foveae, base medially impressed, eyes distinct, gula with prominent median longitudinal carinate ridge, two gular foveae, 11 antennomeres, apical three forming club; pronotum broadest near apex, lateral margins slightly sinuate near pubescent antebasal foveae, median antebasal fovea nude, with longitudinal sulcus extending anteriorly from median fovea and indistinct nearing pronotal apex, two procoxal foveae; elytra with two basal foveae, discal fovea with faint stria distinct only on mesal margin to about one-third elytral length; mesosternum with lateral mesosternal foveae, median mesosternal fovea slightly offset to right and with internal apodeme directed antero-laterally to right, lateral mesocoxal foveae present, metasternal foveae present; abdomen with first tergite slightly longer than second, with latero-basal foveae, abdominal apex strongly curved so that fourth tergite not visible in dorsal view, tergite I with short divergent basal longitudinal carinae barely visible; sternite II with both medio-basal and latero-basal foveae. The presence of a discal stria on the elytra places this taxon in the subtribe Brachyglutina of the tribe Brachyglutini (Newton and Chandler 1989).

### *Briaraxis depressa* Brendel

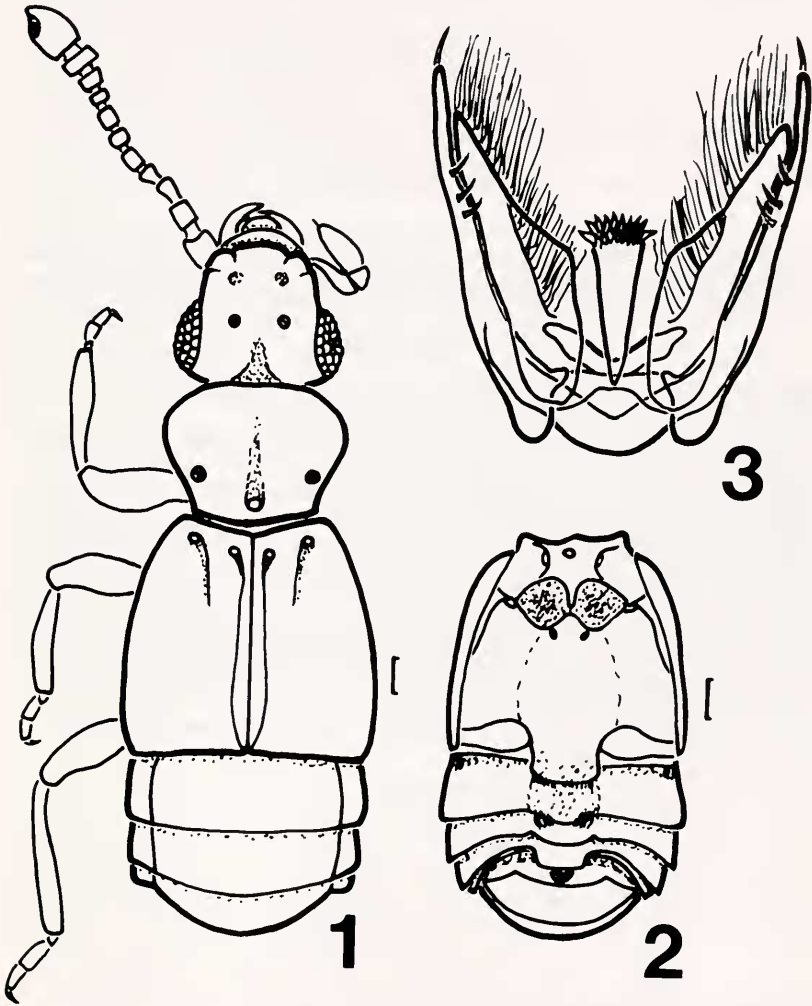
(Figs. 1-3)

*Briaraxis depressa* Brendel 1894:159, pl. V, fig. 6. Type locality: Garden Key, Dry Tortugas, Florida. Holotype female (ANSP). Bowman 1934:82.

**Male from Garden Key, Dry Tortugas:** length 1.69 mm, head and pronotum lightly and densely punctate, elytra lightly roughened; head with two small impressions postero-medial to antennal bases; metasternum longitudinally impressed, with prominent square metasternal flange projecting posteriorly between metacoxae, apex setate except at middle; sternite II with short rounded lobe at middle, setate at lobe apex except at middle, longitudinally impressed in area posterior to metasternal flange, sternite III with medial lobe set off by lateral incisions, sternite IV with medial rectangular flange projecting posteriorly, tergite V barely visible, tergite V with deep medial circular incision, apex of V depressed anteriorly into abdomen.

**Female holotype** lacking metasternal flange and abdominal modifications.

**Specimens examined, 2:** Holotype female, Garden Key, Dry Tortugas, Florida, VI-7/13, Wickham (ANSP); male, same data with Garden Key written on the underside of the label (USNM).



Figs. 1-3. *Briaraxis depressa*. Scale lines equal 0.1 mm.

1. Dorsal view of male, 2. Ventral view of male mesothorax to abdomen, 3. Dorsal view of aedeagus.

**Comments:** This species is known only from the type locality of the Dry Tortugas, several small low sandy islands west of Key West. Wickham (1895) found this species "under rubbish on the beach." He found the fauna of the Dry Tortugas to be typical of that of southern Florida and the Bahama Islands. However, this species was not recorded in treatments of the Caribbean pselaphid fauna (Park *et al* 1976), or the pselaphids of South Bimini, Bahamas (Park 1954).

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